# **Project Description and Construction Notes**

#### NATURAL RESOURCES BUILDING

[MBMG-Petroleum Engineering] Montana Tech of the UM Butte, Montana



**General Information:** The selection committee is looking for creative and finely-executed artwork to be permanently installed in the first floor lounge. Additional sites on the first, second and third floors will be also considered for artwork. The selection committee and the Montana Arts Council encourages creativity and innovation, but the work should be conceptually accessible to the students, faculty, staff and visitors to the building. The committee seeks artworks of any medium.

Up to \$43,200 will be made available for purchase of the artwork, its installation and signage. Quality artistry, manufacture and installation standards must be met, and an engineering report may be required to assure the public safety and longevity of the artwork. Proposals should include any necessary specifications for installation including, but not limited to: structural requirements for installation, specialized lighting of the piece, needs for electricity, water etc., along with the expectation that artists will provide a maintenance document and artist's statement to the facility and Montana Arts Council archive.

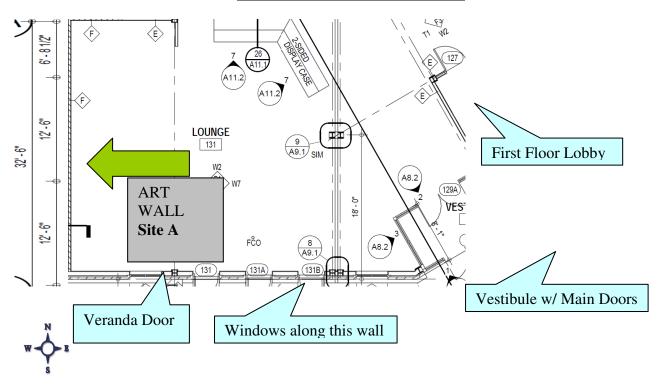
The artist should offer a budget that is inclusive of all project needs and requirements. This budget should include, but is not restricted to: materials, labor, design fees, installation specifications, supervisory/site visits, travel expenses such as: mileage, meals, lodging, building permits and associated fees, inspection requirements, engineer's report, shipping, packing and any rental fees, and appropriate signage as prescribed by the Montana Arts Council staff.

Artists may offer a maximum of three proposals for a single site or multiple sites in the building and should identify the site or sites where they believe their artwork will be best displayed. The committee will take all proposals and ideas into consideration as they determine their nominations. The committee may purchase a combination of work which is ready to hang. Best results are achieved when the artist and selection committee enter into a cooperative design process.

The selection committee and the Montana Arts Council reserve the right to consider all applications. They also may use all or part of the \$43,200 budget for the purchase, signage and display of one or more

pieces, or may reject all applications. Final approval will be made by the Montana Arts Council board after reviewing the nominations and recommendations of the Percent-for-Art selection committee.

## **SITE A: First Floor Lounge**



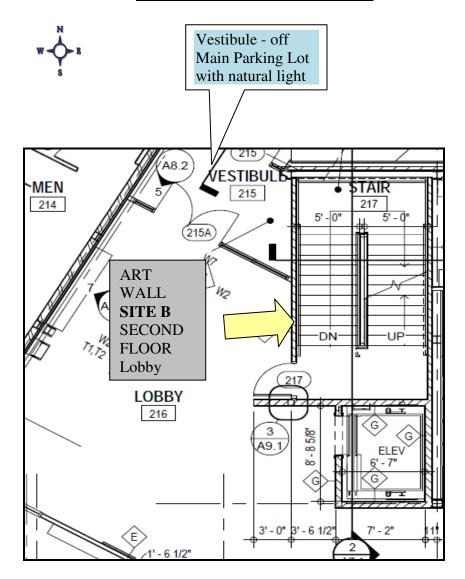
Lounge is furnished with moveable furniture. A two-sided memorial board with donation plaques is located in edge of this area [2-sided Display Case]. Natural light is provided by windows and doors to the veranda on the South side of the room. The art wall is approximately 31' wide and 9' high. Artists should consider the wall space between 36" off the floor line to 12" below the ceiling line when considering a design. Currently, the wall is primed and painted gypsum board over metal studs. Earth tones are used throughout the building.

**Light Valances will provide additional illumination of the Art Wall:** 



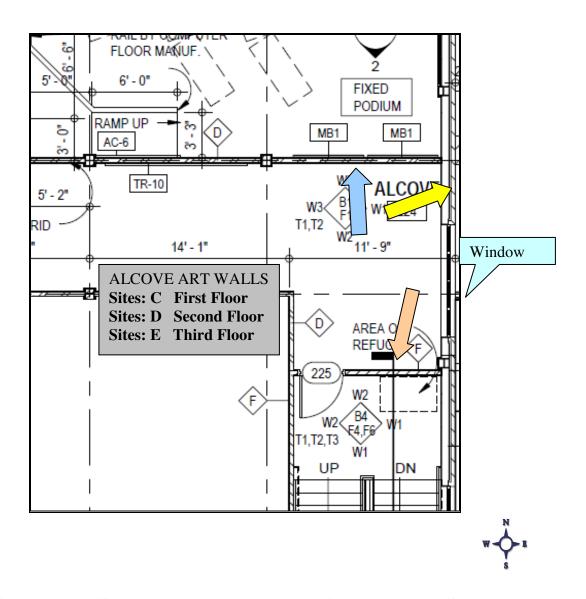


**SITE B: Second Floor Lobby** 



Sites C – E: First, Second and Third Floor Alcove Walls

Alcoves for student and faculty use are located on the east end of the first, second and third floors in the Petroleum Engineering wing. Artwork will be considered for each of these alcoves. Please see measurements table for specifics. Artists will need to consider strong sunlight from East facing windows, and that photosensitive materials will need to be protected. Some alcove walls are interrupted with mechanical devices such as wall sconces, fire extinguishers, light switches, etc., and may be unsuitable for some, or any, artworks. Moveable furniture or built-in benches will be placed in these alcoves, which will be used as waiting and tutorial areas. Additional photographs are available.



Example of space: this is Site C (First Floor Alcove) - each floor is slightly different:



## **ALL SITES**

# Sites A-E on the First, Second and Third Floors will be considered for artwork. These are located in the Petroleum Engineering wing.

All artwork must be hung a minimum of 12" from the ceiling line. The displayed work must adhere to ADA regulation 4.4. This includes, but is not limited to, the following guidelines: exhibits displayed above 27" or below 80" from the floor must not protrude more than 4 inches from the wall or they can be hazardous to a person with low vision, or who is blind.

In these locations, it may not be practical to install a barrier to accommodate deeper artworks. Furniture located in the lobbies and alcoves will necessitate that artwork be hung at least 36" from the floor line.

## **Measurement Chart – Sites A-E**

	NATURAL RESOURCES BUILDING				
	[MBMG-Petroleum				
Site	Engineering Bldg]	South Wall	West Wall	North Wall	East Wall
	Measurements for Art Walls				
Α	First Floor Lobby	NA	48"H X 396"W	NA	NA
В	Second Floor Lobby	NA	NA	NA	48"H X 72"W
С	First Floor Alcove - East Wing	48"H X 60"W	NA	NA	48"H X 24"W
D	Second Floor Alcove -East Wing	48"H X 60"W	NA	48"H X 120" W	48"H X 36"W
E	Third Floor Alcove- East Wing	NA	NA	NA	48"H X 24"W
	All Measurements are Approximate				

All photos and architectural drawings in this document courtesy of Tony Perpignano, Architect, CWG Architects, Helena

## Mission, Vision and Objectives Statements

### Montana Bureau of Mines and Geology

#### Serving the citizens of Montana through geologic and hydrologic research and information

The Montana Bureau of Mines and Geology is the principal source of earth science information for the citizens of Montana. Since 1919, it has been mandated to conduct research and assist in the orderly development of the State's mineral and water resources. As a non-regulatory agency, the Bureau provides extensive advisory, technical, and informational services on geologic, mineral, energy, and water resources in the State. Increasingly, the Bureau also is involved in the study of environmental impacts to land and water, whether the impacts were caused by past practices in hard-rock mining or by current activities in agriculture or industry.

The Bureau's basic support comes from a biennial legislative appropriation. Additionally, the Bureau seeks funding for extensive research from outside sources. Many of our projects are conducted jointly with various State and Federal agencies, county governments, municipalities, and other local groups. Operating out of two offices in Montana, in Butte and Billings (located on the Montana Tech and MSU-Billings campuses, respectively), we employ 59 full-time staff, including 31 research professionals and 24 in technical/clerical positions. Products of the Bureau's research are published by our Information Services Division or through the scientific literature.

The Mineral Museum is located on the Montana Tech Campus, overlooking the historic mining city of Butte. The Museum exhibits 1,300 specimens from its extensive collection of minerals from Butte, Montana, and worldwide localities. The Montana Bureau of Mines and Geology Earthquake Studies Office is also located in the Museum, offering the visitor an opportunity to see active seismographs recording real time data from Montana's seismic network. The Mineral Museum conducts tours, lectures, workshops, and field trips in addition to serving as a resource for visitors.



The mission of the Montana Bureau of Mines and Geology is to help ensure Montana's land and water resources provide benefits for present and future generations.



For the past 108 years, Montana Tech has earned a reputation as one of the finest science, engineering, and technical colleges in the world. Montana Tech is a leader in undergraduate and graduate education and research in the Pacific Northwest in engineering, science, energy, health, information sciences and technology. With more than 40 academic programs and 38 clubs and organizations, Tech offers tremendous opportunities in a student friendly environment.

Recently, the Princeton Review selected Montana Tech as one of the nation's best institutions for undergraduate education featuring Tech in their 2009 edition of "The Best 368 Colleges". Montana Tech was also named by U.S. News & World Report as the 3rd Top Public Baccalaureate College in the West in the 2009 edition of "America's Best Colleges".

Montana Tech is located atop Tech hill in beautiful, historic Uptown Butte, Montana. Butte is located midway between Yellowstone and Glacier Parks providing outstanding opportunities for recreation including skiing and other winter sports, camping, hiking, biking and world-class fishing.

We invite you to visit Montana Tech! As you tour our campus on the hill, you will have a special opportunity to learn more about the college through first-hand contact our Tech family – our students, faculty, and staff. We appreciate your interest, and as you continue your journey, we hope you enjoy what you see.

#### unexpectedly affordable

Nearly \$1 million in new student scholarships are awarded to new students each year. Tech students graduate with less debt than students from any other 4-year Montana college or university. The low cost of living and affordable housing in Butte is a huge benefit to Tech students. With average job placement rates at 97% and high starting salaries, students are able to pay back student loans much easier.

#### impressively personal

Montana Tech is student friendly and takes pride in quality instruction provided by highly qualified faculty members. A 16:1 student to faculty ratio and an average class size of 19 facilitate the relationships that lead to student success. Students learn from professors, most with current industry experience, not teaching assistants. Free tutoring and other educational services are provided by the Tech Learning Center (TLC - the acronym is not coincidental). Students receive the help they deserve.

#### exceptionally driven

Students participate and excel in international academic competitions. The Career Services department works to place hard working, success oriented students in internships, as well as permanent positions. The current overall placement rate of Montana Tech graduates is 97%. New student scholarships are awarded on previous academic success primarily GPA, class-rank, and extra-curricular activities with consideration of ACT or SAT.

#### refreshingly real

Tech is located in beautiful southwestern Montana with abundant opportunities for outdoor recreation. Campus life is full of activities ranging from hikes to the M to live bands to casino night in the residence halls. Life here is laid back and personal where you will be on a first-name basis with your professors. Classes are challenging with an emphasis on teamwork and collaboration. Barron's Best Buys for

colleges recognizes Montana Tech stating "you would be hard pressed to find a place as low-key and personal in this realm of academe".

#### quality focused

Tech faculty members maintain industry experience and are on the cutting edge of science research. Industry advisory boards work closely with faculty to develop current and challenging curricula.

# Petroleum Engineering Department, MT Tech

#### Overview

Montana Tech's Petroleum Engineering program is one of the largest offered in the United States. Students can utilize five state-of-the-art laboratories, completely equipped for simulating drilling and production of oil and gas wells and analysis of rock and fluid properties, providing much-needed "hands-on" experience.

Students choose to specialize in one of three areas:

- Reservoir Engineering: Studying the physical properties of oil and gas reservoirs with the goal of maximizing recovery while accommodating economic constraints. Learning to estimate reserves, perform economic evaluations, and conducting reservoir simulation studies using computer modeling.
- Drilling Engineering: Learning to design oil and gas drilling operations in an environmentally sound manner and facing challenges such as gas kicks, corrosion, and offshore drilling.
- Production Engineering: Studying the principles involved in the production and field processing of oil and gas. Learning to design efficient and cost-effective procedures for lifting oil and gas from underground reservoirs.

A degree in Petroleum Engineering from Montana Tech equips the graduate with the skills to explore, design, drill, and produce oil, gas, and other natural resources.

Petroleum engineering is offered in both an undergraduate BS and a graduate level MS. Elective classes allow special training in Reservoir, Drilling and Production topics.